



## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Translation

Applicant's or agent's file reference 0000053692	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/006895	International filing date (day/month/year) 30 June 2003 (30.06.2003)	Priority date (day/month/year) 05 July 2002 (05.07.2002)
International Patent Classification (IPC) or national classification and IPC C08J 9/18, 9/00		
Applicant BASF AKTIENGESELLSCHAFT		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 11 November 2003 (11.11.2003)	Date of completion of this report 09 July 2004 (09.07.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/006895

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☒ the description:  
pages \_\_\_\_\_ 1-7 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_ 1-11 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 03/06895

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	4, 9-11	YES
	Claims	1-3, 5-8	NO
Inventive step (IS)	Claims		YES
	Claims	4, 9-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims		NO

### 2. Citations and explanations

This report makes reference to the following documents:

D1: DE 199 50 420

D2: EP 0 831 115.

1) D1 discloses a method for producing foam particles that contains all of the stages of the present method, i.e. extruding a mixture of polypropylene and thermoplastic, cooling, granulating, producing an aqueous dispersion of the granules obtained thereby in a stirred tank reactor, impregnation with a propellant at a high temperature, and finally, expansion. Furthermore, the polypropylene minigranules according to D1 consist of polypropylene NOVOLEN 3200 MC, polyamide ULTRAMID B 3, wax and talcum (see D1, page 4, examples), i.e. the same components as in the minigranules according to the present application. According to D1, the quantity of polyamide ULTRAMID B 3 (the cell opener) is 4.75 and 28.5 percent by weight of the propylene polymer particles (see D1, page 4, MG2 and MG3). The bulk density of the foam particles obtained in examples 2 and 3 of D1 is 51 and 86 g/l (see examples 2 and 3 in the table on page 5). Since the particles in D1 are produced with the same starting materials, in the same quantities, and using the same method as in the present application, they must show cell openness as claimed.

Therefore, the subject matter of the present claims 1-3 and 5-8 lacks novelty (PCT Article 33(2)) (see also D1, page 2, line 65 to page 3, line 60).

Claim 6 contains no temperature restriction during reactor expansion. Therefore, this expansion temperature cannot be taken into account for the examination with respect to novelty.

Claims 4 and 9-10 are dependent on claim 1 and do not meet the PCT requirements for inventive step (PCT Article 33(3)) because the present application does not clearly indicate what problem is solved with respect to D1.

2) The post-expansion and sintering of foam particles is a standard method (see D2, column 3, lines 48-52), and therefore the post-expansion and sintering of already known foam particles does not involve an inventive step. Consequently, the subject matter of the present claim 11 is not inventive (PCT Article 33(3)).